

ABSTRACT

A system and method for the alignment of optical elements using an unmounted LED die with a small lens as a beacon for each channel in an optical switch. One LED is mounted next to each optical fiber in an alignment hole in a ceramic form. Each LED has a conductive trace and wire bond for independent electrical control. The LED shines through a pinhole to limit the divergence of the beam. The pinhole is at the focus of a small lens which is positioned adjacent to the form, and creates a real image at its target. Because the LED and fiber are fixed closely together in the form, misalignment due to thermal effects or mechanical drift is negligible.

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